

10/567027
IAP9 Rec'd PCT/PTO 03 FEB 2006

THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE
AMENDMENTS TO THE CLAIMS OF THE INTERNATIONAL
APPLICATION UNDER PCT ARTICLE 19:
Amended Sheets (pages 18, 19, 19/1)

What is claimed is:

1. (Amended) A tactile feedback apparatus comprising
 - an interfacing element acted on by a user;
 - a piezo actuator arranged on said interfacing element for presenting tactile feedback to a user acting on said interfacing element; and
 - a controller for driving controlling said piezo actuator;
 - said piezo actuator being of a circular-shaped multi-layered structure and having a shape changed to an upturned dome shape or to a downturned dome shape on application of voltages of opposite polarities to a plurality of layers in an upper portion of said multi-layered structure and to a plurality of layers in a lower portion of said multi-layered structure;
 - said controller controlling the change between the upturned dome shape and the downturned dome shape by a signal.
2. The tactile feedback apparatus as defined in claim 1 wherein at least one of the amplitude and the frequency in a change between said upturned dome shape and the downturned dome shape is determined depending on an inputting operation by a user mediated by said interfacing element.
3. The tactile feedback apparatus as defined in claim 1 further comprising
 - a force sensor for detecting the force applied at the time of the operation for inputting by a user; wherein
 - at least one of the amplitude and the frequency in a change between said

upturned dome shape and the downturned dome shape is determined depending on the force as detected by said force sensor.

4. The tactile feedback apparatus as defined in claim 1 wherein
said interfacing element is a joystick operating device, a button device or a
switch device.

5. (Amended) A system comprising a main body part executing an application program and a user interface program and a control device mounted in separation from said main body part and adapted for controlling the state of said application program;

 said control device including an interfacing element acted on by a user;
 a piezo actuator arranged on said interfacing element for presenting tactile feedback to a user acting on said interfacing element; and
 a controller for driving controlling said piezo actuator;

 said piezo actuator being of a circular-shaped multi-layered structure and having a shape changed to an upturned dome shape or to a downturned dome shape on application of voltages of opposite polarities to a plurality of layers in an upper portion of said multi-layered structure and to a plurality of layers in a lower portion of said multi-layered structure;

 said controller controlling the change between the upturned dome shape and the downturned dome shape by a signal;

 such control by said controller being managed in keeping with the current

state of said application program and the interface program.